



**Indiana**  
**Department**  
**of**  
**Health**

# INDIANA STATE TRAUMA CARE COMMITTEE

March 18, 2022

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)

## OUR MISSION:

To promote, protect, and improve the health and safety of all Hoosiers.

## OUR VISION:

Every Hoosier reaches optimal health regardless of where they live, learn, work, or play.



# Housekeeping

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- Submit your name and organization in the chat box for attendance.
- Submit questions in the chat box or you can unmute your computer.
- **Please** make sure you are on mute if you are not speaking.

This meeting has been public noticed.

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# Introduction and approval of meeting minutes

Lindsay Weaver, M.D., FACEP  
*Chief Medical Officer*

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# IDOH Updates

Lindsay Weaver, M.D., FACEP  
*Chief Medical Officer*

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# PI Subcommittee Updates

Peter Hammer, MD, FACS

*Trauma Medical Director, IU Methodist*

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# ACS Updates

Scott Thomas, MD, FACS

*Trauma Medical Director, Beacon Health*

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# IDHS/EMS Updates

Michael Kaufmann, MD, FACEP, FAEMS  
*State EMS Medical Director*



# HEA 1314 – legislative update



- Legislative Summary
- **Section 11** – Requires IDHS, IDOH, the Integrated Public Safety Commission, and the Statewide 911 Board to make recommendations to the General Assembly regarding: 1) ways the 911 system can increase interoperability for EMS responses, and 2) the effectiveness of regionalized trauma systems and the impact on patient care
  - This provision is in response to discussions that arose during the 2021 Interim Study Committee on Public Health, Behavioral Health, and Human Services - Trauma Care hearing
- **Section 19** – Modernizes the definition of “emergency medical services” to account for care rendered without transportation and care provided during interfacility transfers
  - The current definition does not include two significant aspects of EMS – providing care to a patient when the patient does not need to be transferred to a hospital and providing care to a patient while transferring the patient from one hospital to another hospital if a higher level of care is needed for the patient
- **Section 20** – Amends the definition of “emergency patient” to remove reference to transportation
  - The current definition is outdated as EMS often renders care without transporting the patient

# HEA 1314 Legislative Update



- **Section 26** - Allows the EMS Commission or IDHS to share certain EMS data with another entity for the purpose of improving patient care and outcomes.
- Allows the EMS Commission or IDHS to harness the data EMS providers share with IDHS in order to identify and address trends in patient health outcomes
- **Section 36** – Requires a health plan operator to fairly negotiate rates and terms with an ambulance service provider willing to become a “participating provider” and provides that if negotiations do not result in the ambulance service provider becoming a “participating provider” both entities must keep certain records regarding the negotiations for two years
- **Section 37** – Requires certain life, accident, and health insurance plans that provide reimbursement for different types of EMS care must provide reimbursement on an equal basis regardless if the service involves transporting the patient
- **Section 38** - Requires certain accident and sickness insurance policies or HMOs that provide reimbursement for EMS must also provide reimbursement for certain ambulance services or specialty care transport services
- **Section 39** - Requires certain health maintenance organization plans that provide reimbursement for different types of EMS care must provide reimbursement on an equal basis regardless if the service involves transporting the patient.



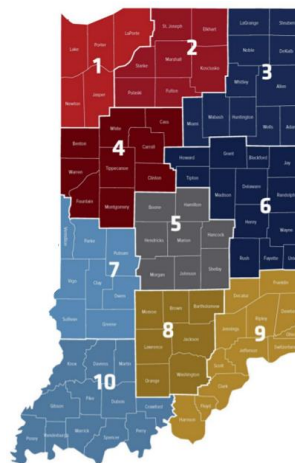
## Frontline of the Healthcare System Safety Net



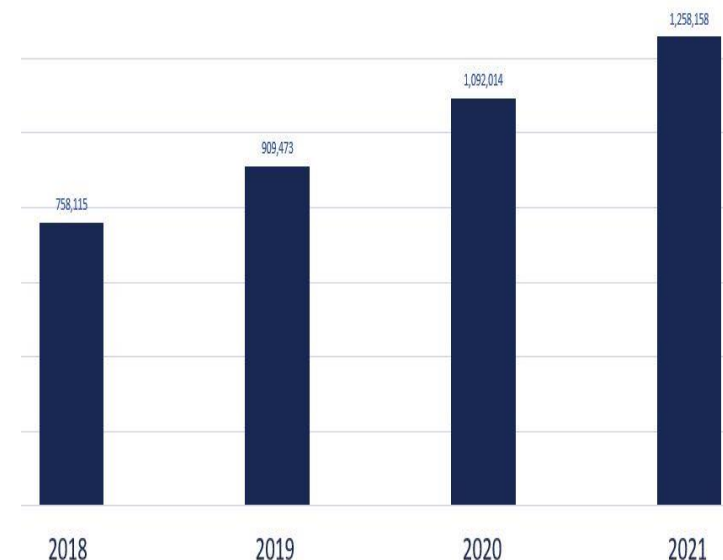
*EMS stands at the intersection of public safety, public health, and healthcare*

### EMS By the Numbers

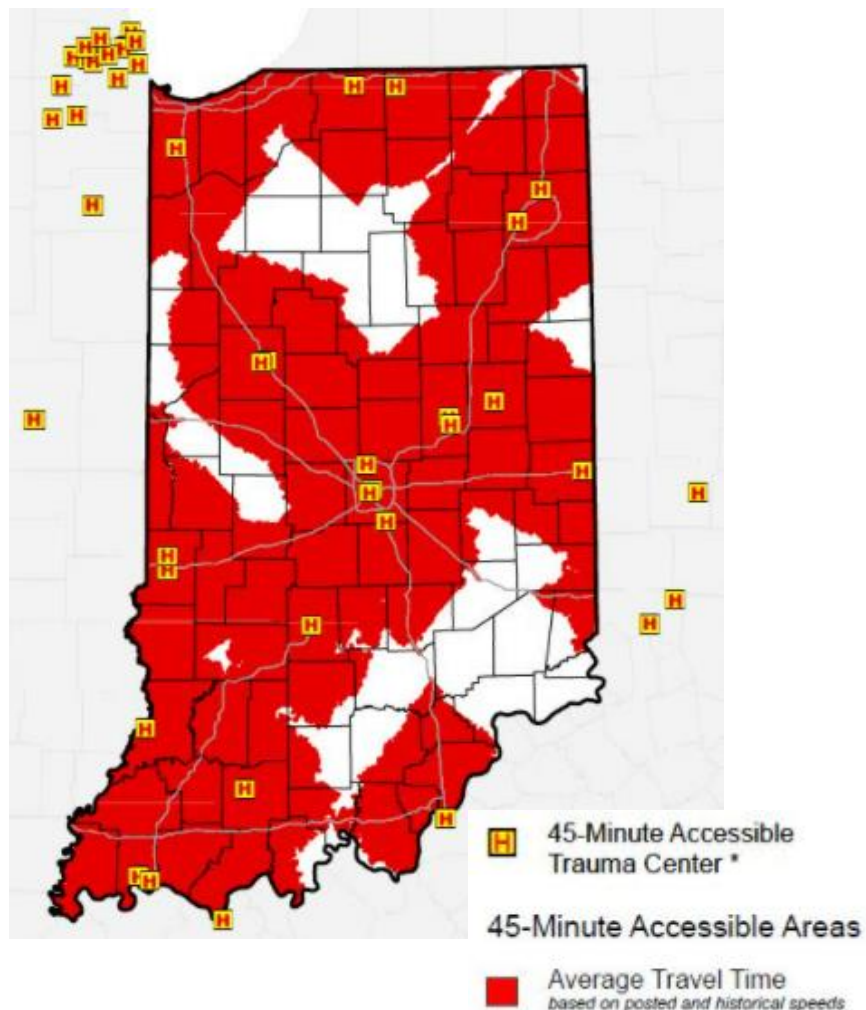
- Touches 1.25 million+ Hoosiers annually.
- 831 EMS provider agencies; 331 operate ambulances
- 1,789 emergency ambulances in the state, down from 2000+ only 2 years prior
- 23,000+ Emergency medical personnel
- 10 training/certification districts



### Annual Indiana EMS Volume



## Significant improvements over the last decade but gaps remain



- **Injury: leading cause of death for Hoosiers <age 45**
- 92% of Hoosiers have access to a trauma center within a 45-minute drive
- Not enough EMS providers, especially in rural areas and not enough trauma centers
- Responsibility shared by two agencies: IDHS/EMS and IDOH Division of Trauma & Injury Prevention

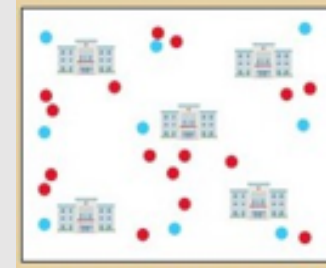
**Number of IN Trauma Centers by Level and Location**

Level	Number	Location
I	4 + 1 Prov.	Marion County
II	5	Evansville, Fort Wayne, South Bend
III	13 + 1 Prov	Anderson, Bloomington, Crown Point, Elkhart, Indianapolis, Jasper, Lafayette. Muncie, Richmond, Terre Haute, Vincennes

# Close the Urban/Rural EMS Gap

- Emergencies happen every day in Indiana and how EMS responds can be the difference between life and death
- Preparedness begins by being ready for those emergencies 24/7/365
- All Hoosiers should be guaranteed an ALS ambulance regardless of where they live
- Unfortunately, people are dying because access to EMS service is unequally distributed across rural and urban areas
- Having reliable and sustainable sources of funding for EMS readiness and emergency preparedness will help EMS provider agencies who deliver EMT and paramedic services to become and stay operational

## Urban/Suburban County, IN Pop. 338,000



**Time to definitive care = minutes**

16 ambulances available 24/7  
45 ALS capable apparatus  
Ave Response Time = 3 minutes  
Ave Transport Time = 5 minutes  
Destinations facilities in county: 2 Level 1 Trauma, 2 Pediatric Trauma, 1 Burn Center

## Rural County, IN Pop. 15,498



**Time to definitive care = hours**

2 ambulances available 24/7  
8 BLS non-transport apparatus  
Ave Response Time = 17 minutes  
Ave Transport Time = 30 minutes  
No destination facilities in county  
Air transport available outside county  
Transport time to trauma center = 5 hours roundtrip



# EMS CERTIFICATIONS



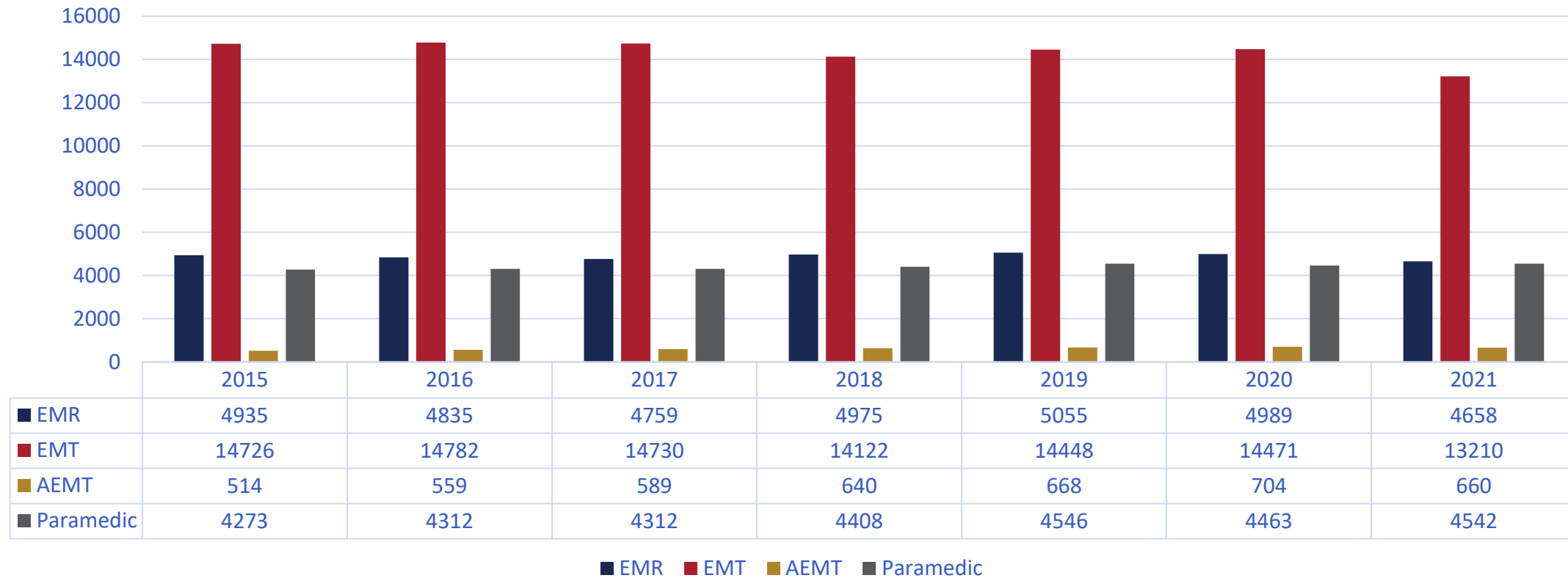
• Certificates	2022, 2021, 2020
– Training Institutions	109 (115)
– Supervising Hospitals	86 (91)
– Providers	831, 832, 833
– Vehicles	
• Certified Vehicles	1810, 2249, 2600
• ALS non-transport	520, 476, 584
• Air Ambulance Rotorcraft	60, 54, 52
– Personnel	
• EMR	4639, 4870, 5055
• EMT	13,170, 14,006, 14,448
• Advanced EMT	657, 642, 578
• Paramedic (license)	4616, 4518, 4408
• Primary Instructor	626, 611, 566



# State of Indiana EMS Personnel



EMS Personnel Certifications by Group 2005-2021



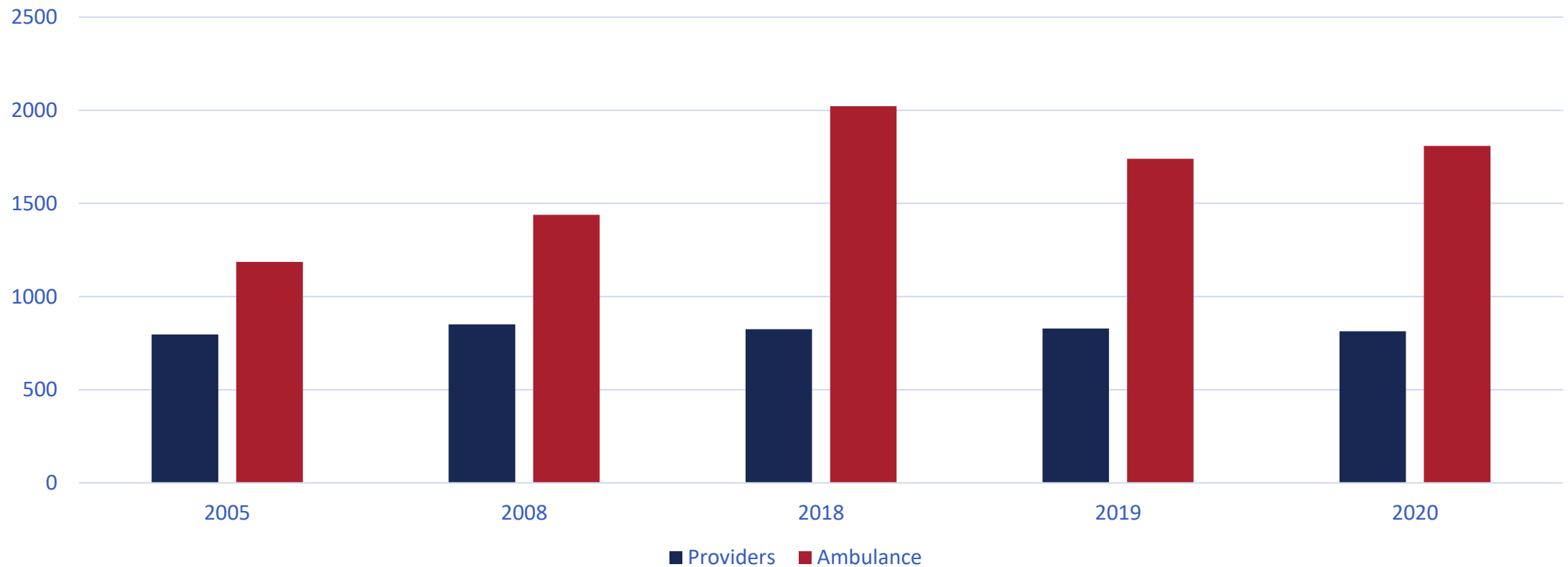
Source: Indiana Department of Homeland Security ACADIS Certifications Database Records



# Status of Indiana Ambulances



EMS Provider Organizations and Ambulances



Source: Indiana Department of Homeland Security ACADIS Certifications Database Records





# Academic EMS Courses Statewide 2019 vs 2020

- 2019:
- EMR – 113
- EMT – 223
- AEMT – 12
- Paramedic – 24
- Primary Instructor – 14

- 2020:
- EMR – 76
- EMT – 194
- AEMT – 6
- Paramedic – 23
- Primary Instructor – 23

- 2021
- EMR – 83
- EMT – 228
- AEMT – 7
- Paramedic – 25
- Primary Instructor - 12



Highschool based EMS education courses and community college based courses have the lowest passing rates in the State.

Hospital bases courses have the highest passing rates.

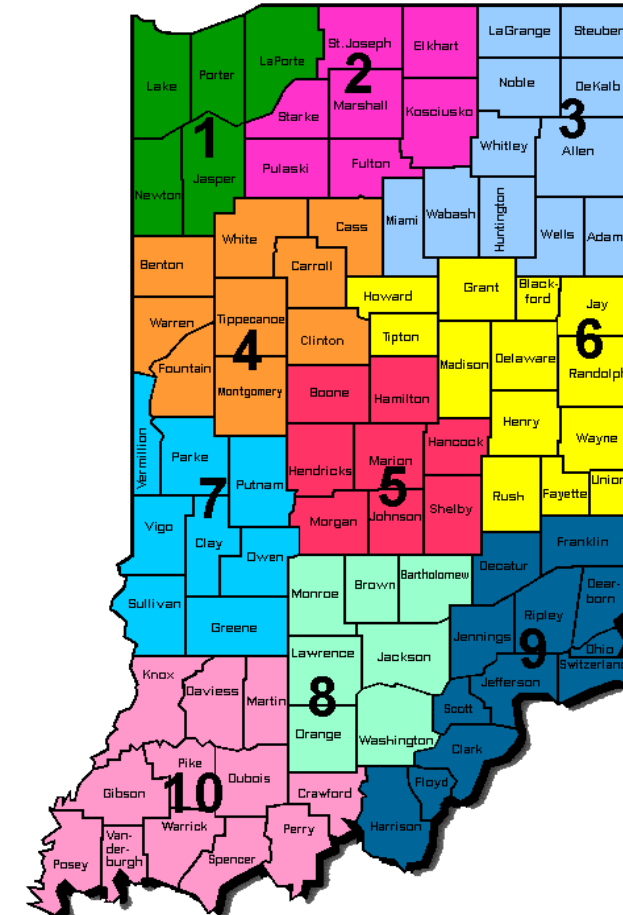
How do we encourage more hospital based involvement in EMS education and operations?

# EMS System Metrics – as of January 2021

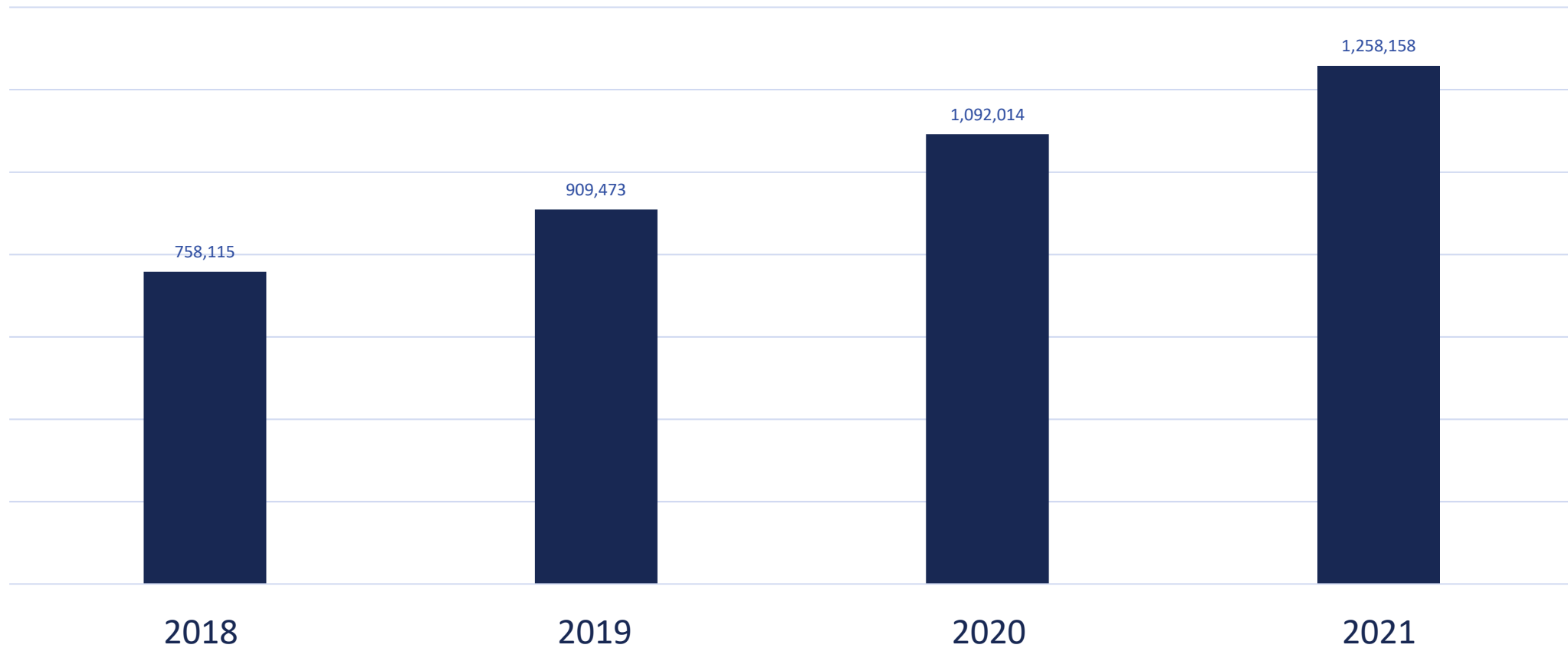


- Year 2021, (2020), (2019)
- Total Ambulances in state 1789, (1809) (2022)

Location	Amb.	NT	Air
District 1	269	52	5
District 2	153	67	3
District 3	108	45	9
District 4	103	18	3
District 5	441	235	7
District 6	317	39	16
District 7	73	9	1
District 8	40	18	1
District 9	184	22	12
District 10	101	9	4
Totals	1789	514	61



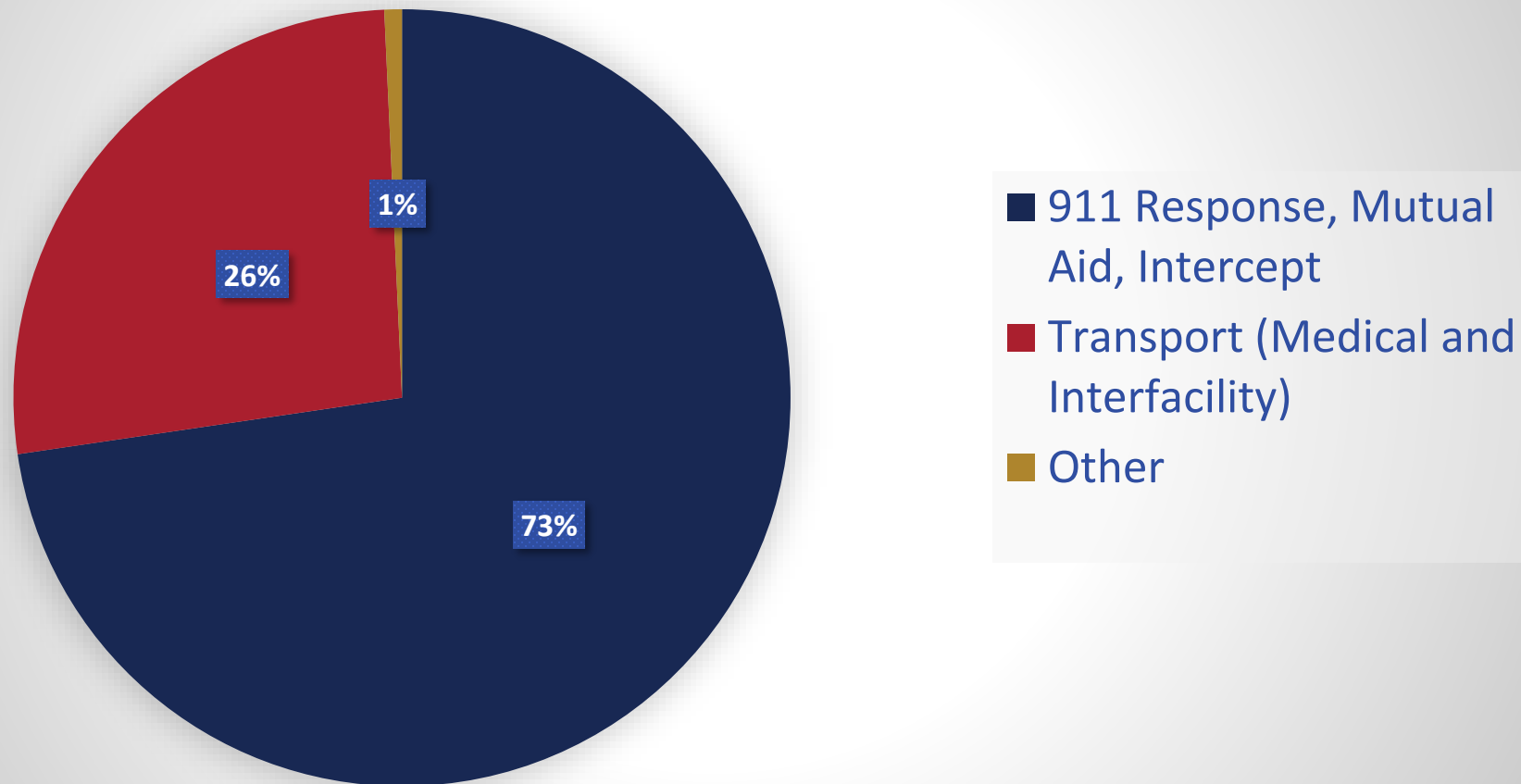
# Annual Indiana EMS Run Volume - YOY



# Types of EMS Runs in 2021



Types of EMS Run in Calendar Year 2021



# How Are We Doing So Far?

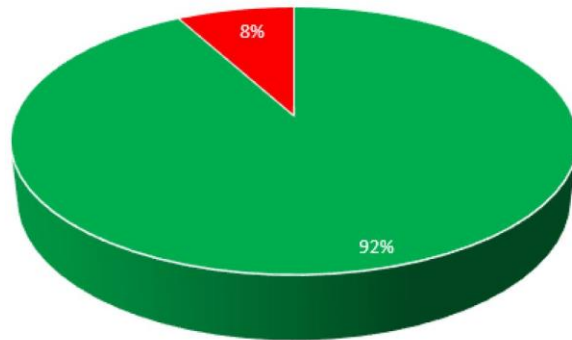


## State of Indiana Emergency Medical Services

### Monthly EMS Reporting



January 2022



Agencies Reporting

**306**

Agencies Required to Report

**331**

Reporting Percentage

**92%**

Total ePCR's submitted

**95,737**



# **OUT-OF-HOSPITAL KETAMINE USE BY INDIANA EMS PROVIDER AGENCIES: A RETROSPECTIVE ANALYSIS**

Michael A. Kaufmann, MD, FACEP, FAEMS

Nicole Nord, EMT-B

# *Background and Purpose*



- Ketamine – Unique drug, variety of uses, limited depression of respiratory drives, fewer negative hemodynamic effects
- Purpose: to evaluate and understand ketamine usage in the state of Indiana within the prehospital environment
  - Ketamine in the news

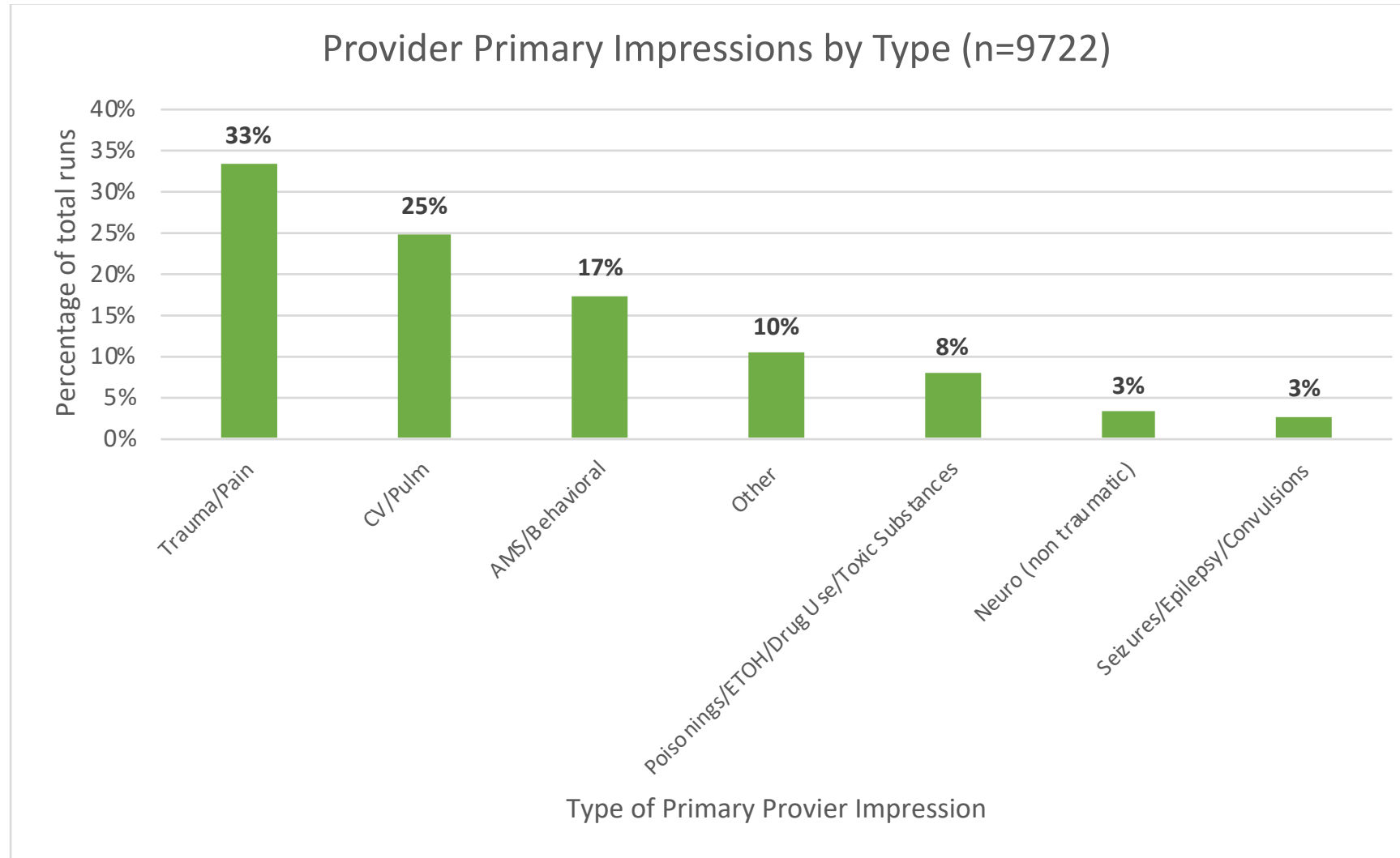
# *Methods*



- 28,639 EMS runs from December 16, 2016 through April 8, 2021
- 9,722 unique patients
- 15 fields of data analyzed (objective and subjective)



# Figure 1: Provider Primary Impressions by Type

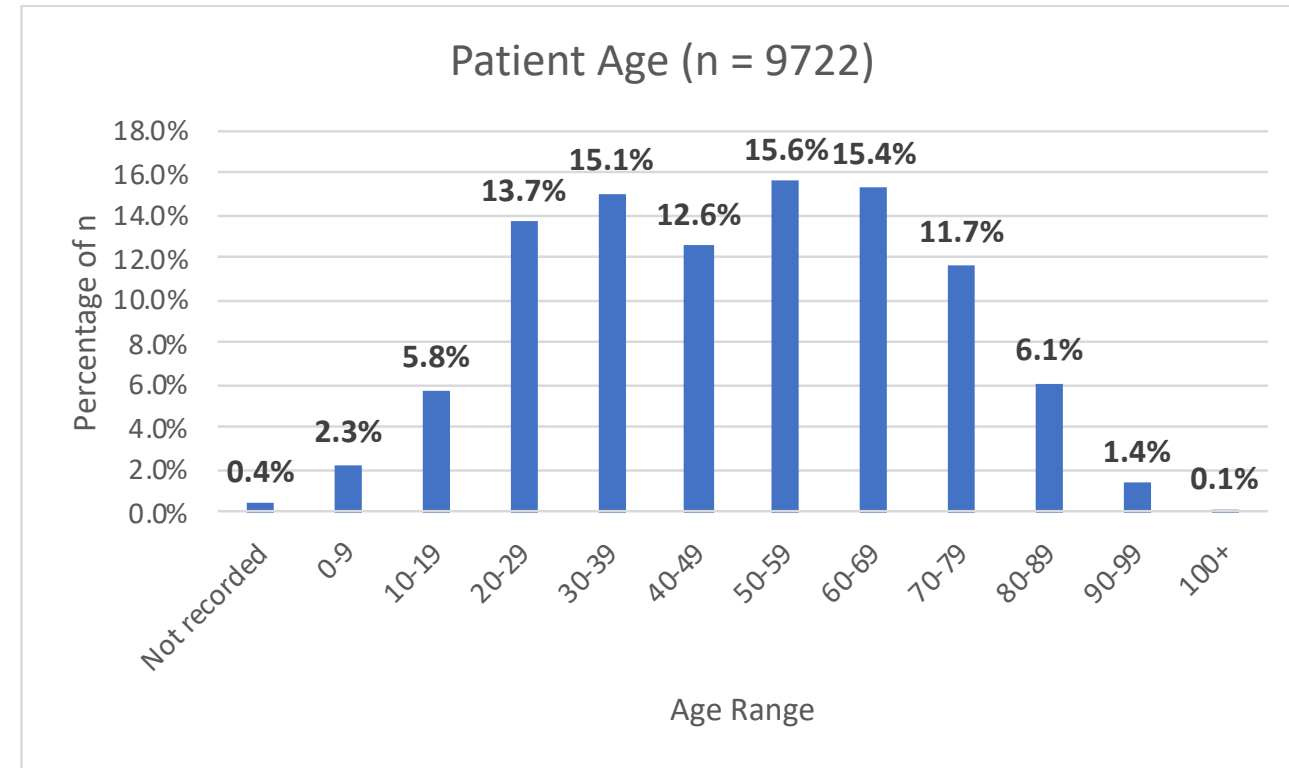


# Figures 3, 4, 5: Patient Demographics



Race	n	percentage of N (N=9722)
White	7226	74.33%
Left Blank	1414	14.54%
Black or African American	855	8.79%
Hispanic or Latino	147	1.51%
Asian American/Pacific Islander	37	0.38%
Other Race	27	0.28%
American Indian or Alaska Native	6	0.06%
Hispanic or Latino, White	4	0.04%
Black or African American, Hispanic or Latino	3	0.03%
Hispanic or Latino, Black or African American	3	0.03%

Patient gender	percentage of N (N=9722)
Male	59.55%
Female	39.44%
Unknown (Unable to Determine)	0.59%
Not Recorded	0.40%
Not Applicable	0.03%





*Come in* We're  
**OPEN**

# Diversion Notables



- Indiana has seen a 100% DECREASE in Emergency Department ambulance diversion in the last 60 days.
- IDOH, IDHS, IHA in coordination with the major healthcare system leadership have loosely committed to no diversion for a 30 day window – 90 day extension.
- D1 and D2 hospitals came off diversion on Thursday 1/13 with a commitment to stay off diversion.
- Marion County hospital leadership have agreed to a 30 day diversion moratorium that started 1/18/2021.



# Marion County Destination Tracking (hourly)

## Eskenazi

Hour of Day	0	1	2	3	4	5	8	9	10	11	12	13	14	15	16	17	18	19
495023	2	3	3	1	1	1	4	2	5	10	2	8	8	3	5	5	2	1

Green - < 7 / Yellow - 7 - 11 / Red - > 11

## Methodist

Hour of Day	0	1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
495051	1	2	1	1	1	2	1	3	1	2	5	3	4	3	4	6	5	5	4	0
455002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Green - < 6 / Yellow - 6 - 10 / Red - > 10

## St. Vincent

Hour of Day	1	2	6	7	8	10	11	13	14	15	16	17	18
495075	1	2	1	1	2	1	2	1	2	1	2	3	3

Green - < 4 / Yellow - 4 - 5 / Red - > 5

## Community East

Hour of Day	1	2	3	5	7	8	9	10	11	12	13	14	15	18	19
495068	3	1	2	2	1	1	2	4	4	4	1	2	6	5	3

Green - < 6 / Yellow - 6 - 8 / Red - > 8

## Community South

Hour of Day	1	2	5	7	9	11	12	13
495109	2	1	1	1	3	1	2	1

Green - < 3 / Yellow - 3 - 4 / Red - > 4

## Community North

Hour of Day	0	1	3	7	9	10	11	12	13	15	16	17
491437	1	1	2	2	4	3	2	1	2	2	1	2

Green - < 3 / Yellow - 3 - 5 / Red - > 5

## St. Francis

Hour of Day	3	6	8	9	10	11	12	13	14	15	17	18	19
494972	2	2	2	2	4	2	3	1	3	1	2	2	2

Green - < 4 / Yellow - 4 - 5 / Red - > 5

## Community Heart & Vascular

Hour of Day	1	6	7
493312	1	1	1

Green - < 1 / Yellow - 1 - 2 / Red - > 2

## Peyton Manning Children

Hour of Day	3	13	16
495075C	1	0	2
495075	0	1	0

Green - < 1 / Yellow - 1 - 2 / Red - > 2

## Riley Childrens Hospital

Hour of Day	2	8	13	14	15	16	17	19
495052	1	1	1	2	2	1	2	1

Green - < 1 / Yellow - 1 - 2 / Red - > 2

# Surge Transport Plan v2.0



- Through 3/10/2022 a total of 2667 transports completed

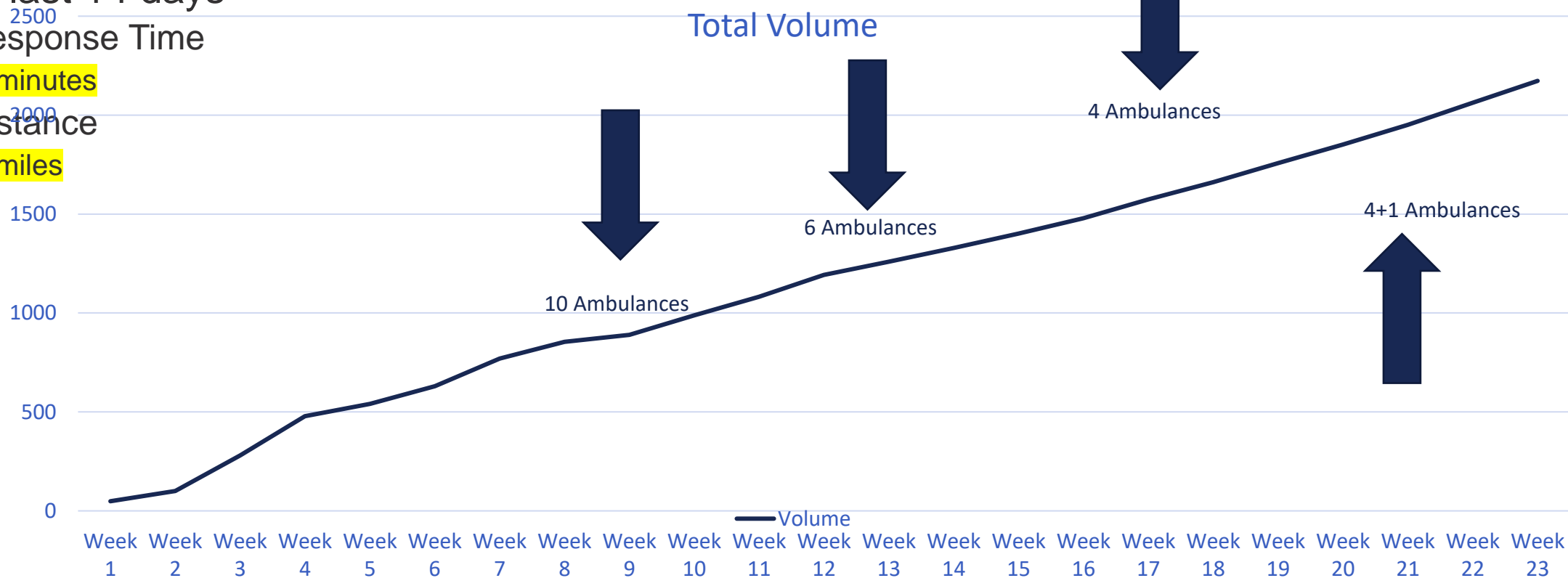
- Over the last 14 days

- Avg Response Time

68 minutes

- Avg Distance

44 miles





**QUESTIONS?  
COMMENTS?  
FEEDBACK?**



# Other Business

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## **Next ISTCC Meeting:**

**May 20, 2022 – In Person**

**9:00am to 1:00pm (Eastern Time)**